

AMENDMENT UNDER 37 C.F.R. § 1.111
US Application No. 09/762,945
Attorney Docket No. Q80251

REMARKS

General remarks.

Applicant has carefully studied the outstanding Office Action in the present application. The present amendment is intended to be fully responsive to all points of rejection raised by the Examiner in the Office Action mailed March 4, 2004, and is believed to place the application in condition for allowance. Favorable reconsideration and allowance of all claims under consideration is respectfully requested.

Claims 1 - 18 and 23 are pending in the application. Claims 19 - 22 are canceled without prejudice or disclaimer. Claims 1, 7 and 8 are currently amended.

The rejection under 35 U.S.C. §112, ¶2.

Claims 7 and 8 stand rejected under 35 U.S.C. 112 as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention. Claims 7 and 8 are corrected to clarify that "the color" is "the single color" having antecedent basis in claim 6. The Examiner is respectfully requested to withdraw this rejection of claims 7 and 8.

The prior art rejections.

Claims 1, 3 - 6, 9 and 12 stand rejected under 35 U.S.C. 102(b) as being anticipated by Luke et al. (U.S. 5,483,603). Claims 2, 7 - 8, 10 - 11, and 13 - 18 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Luke et al. (U.S. 5,483,603) in view of Bishop et al. (U.S. 5,524,152). Claims 14 - 16 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Luke et al. (U.S. 5,483,603) in view of Bishop et al. (U.S. 5,524,152) and further in view of Brecher et al. (5,544,256).

Applicants respectfully traverse the above rejections as applied to each rejected claim.

Luke et al. describes a system and method for automatic optical inspection.

Bishop et al. describes a method of and apparatus for object or surface inspection employing multicolor reflection discrimination.

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Brecher et al. describes an automated defect classification system.

Claim 1 has been amended to recite:

generating a pixelated image of the printed circuit board, said printed circuit board comprising a laminate and a plurality of metal conductors; and

determining the presence of an oxide on a metal conductor from an analysis of the image.

As noted above, Luke et al. describes a system and method for automatic optical inspection. Although Luke discloses distinguishing between a wire portion and a substrate, nothing in Luke, alone or in combination with any of the other cited prior art, shows or suggests determining the presence of an oxide on a metal conductor (as distinguished from other, non-oxidized, parts of the metal conductor) from an analysis of the image.

In view of the foregoing, Applicants respectfully submit that claim 1, as amended, is patentable over Luke. Therefore, Luke does not anticipate the subject matter of independent claim 1. Applicant therefore respectfully requests the Examiner to withdraw the rejection of claims 1 and its dependent claims 3-6, 9, and 12 under 35 U.S.C. § 102.

Furthermore, Applicant respectfully points out that Bishop and Brecher do not compensate for the above-identified deficiencies of Luke vis-à-vis independent claim 1. Even taken for what they would have meant as a whole to an artisan of ordinary skill, the combined teachings of these three references would not have (and could not have) led the artisan of ordinary skill to the subject matter of independent claim 1, much less its respective independent claims.

For the foregoing reasons, Applicant respectfully requests the Examiner therefore also to withdraw the rejection of dependent claims 2, 7, 8, 10, 11, 13-18, and 23 as being unpatentable over Luke in view of Bishop and Brecher.

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Conclusion and request for telephone interview.

In view of the foregoing, this application is believed to be in order. Reconsideration and allowance of this application are respectfully solicited.

If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly invited to contact the undersigned attorney at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

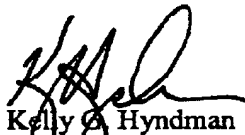
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